DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT

INTERNATIONAL PAPER
DERIDDER FACILITY
EPA ID# LAD 008 077 315
Deridder, Louisiana
Beauregard Parish

Agency Interest # 1249 PER2001001

PERMIT # LAD 008 077 315-PC-RN-1

I. PERMIT PREAMBLE

This permit is issued to International Paper, hereinafter referred to as the Permittee, by the Louisiana Department of Environmental Quality (LDEQ) under authority of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et seq., and the regulations adopted thereunder.

For the purposes of the permit, "Administrative Authority" shall mean the Secretary of the Department of Environmental Quality, or his/her designee.

This permit is based on information submitted in the permit application, and all subsequent amendments, and on the applicant's certification that such information is accurate and that all facilities were or will be maintained and operated as specified in the application.

This permit is conditioned upon full compliance with all applicable provisions of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et seq and the regulations adopted thereunder.

II. GENERAL PERMIT CONDITIONS

II.A. DURATION OF PERMIT

This permit is effective as of the date indicated on the accompanying signature page and shall remain in effect for a maximum period of ten (10) years from the effective date, unless suspended, modified, revoked and reissued or terminated for just cause.

II.B. EFFECT OF PERMIT

This permit authorizes the Permittee to conduct post-closure care activities associated with Waste Management Area A (WMA-A), Waste Management Area B (WMA-B), Waste Management Area C (WMA-C), and the Drip Pad. Corrective action activities for groundwater contamination will be conducted in accordance with the conditions of this permit. The Permittee is prohibited from any storage, treatment or disposal of hazardous waste not authorized by statute, regulation or this permit. Compliance with this permit, LAC 33:V.Subpart 1 and HSWA, constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA and Chapter 9 of the Louisiana Environmental Quality Act (Act). However, compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Section 3013 or Section 7003 of RCRA, or under Section 106 (a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) {42 U.S.C. 9606 (a)}.

In accordance with LAC 33:V.307.G., issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations.

II.C. PERMIT ACTIONS

Any inaccuracies found in the permit application may be cause for revocation or modification of this permit. The Permittee must inform the Administrative Authority of any deviation from, changes or inaccuracies in the information in the permit application.

The Administrative Authority may also suspend, modify, revoke and reissue, or terminate for cause when necessary to be protective of human health or the environment as specified in 40 CFR 270.41, 270.42, 270.43 or LAC 33:V.309.F, 311.A or 323. The Administrative Authority may modify the permit when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulation, or by judicial decision after the permit was issued. The filing of a request for permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated

noncompliance on the part of Permittee does not stay the applicability or enforceability of any permit condition.

II.D. SEVERABILITY

The conditions of this permit are severable and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

II.E. DUTIES AND REQUIREMENTS

II.E.1. Duty to Comply

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance may be authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit (LAC 33:V.701), constitutes a violation of the LAC 33:V.Subpart 1 and the Environmental Quality Act and is grounds for enforcement action which may include permit termination, permit revocation and reissuance, permit modification, or denial of permit renewal application.

II.E.2. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must reapply for the permit as required by the LAC 33:V.303.N and 309.B. Notification shall be at least 180 calendar days before the permit expires.

II.E.3. Permit Extension

This permit and all conditions herein will remain in effect beyond the permit's expiration date until the Administrative Authority issues a final decision on the re-application, provided the Permittee has submitted a timely, complete new permit application as provided in LAC 33:V.309.B and 315.A.

II.E.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

II.E.5. Duty to Mitigate

The Permittee shall immediately take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit as required by LAC 33:V.309.D.

II.E.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related ancillary equipment) that are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

II.E.7. Duty to Provide Information

The Permittee shall furnish to the Administrative Authority, within a reasonable time, any information which the Administrative Authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Administrative Authority upon request, copies of records required by this permit.

II.E.8. Inspection and Entry

The Permittee shall allow the Administrative Authority or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- II.E.8.a. enter upon the Permittee's premises where a regulated activity is located or conducted, or where records must be maintained under the conditions of this permit;
- **II.E.8.b.** have access to and copy, at reasonable times, any records that must be maintained under the conditions of this permit;
- II.E.8.c. inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operation regulated or required under this permit; and
- **II.E.8.d.** sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the

Administrative Authority any substances or parameters at any location.

II.E.9. Sample Monitoring and Records

II.E.9.a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, "SW-846", latest revision; Manual of Ground Water Quality Sampling Procedures, 1981, EPA-600/2-81-160, as revised; Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Facilities, 1977, EPA-530/SW-611, as revised; or an equivalent method as specified in the approved Sampling & Analysis Plan referenced in Attachment 1.

II.E.9.b. Records of monitoring information shall include:

- II.E.9.b.(1) the date, exact place, and time of sampling or measurements;
- II.E.9.b.(2) the name(s) and signature(s) of the individual(s) who performed the sampling or measurements:
- II.E.9.b.(3) the date(s) analyses were performed;
- II.E.9.b.(4) the name(s) and signature(s) of the individual(s) who performed the analyses;
- II.E.9.b.(5) the analytical techniques or methods used;
- II.E.9.b.(6) the results of such analyses; and
- II.E.9.b.(7) associated quality assurance performance data.

II.E.9.c. Laboratory Quality Assurance/Quality Control

In order to ensure the accuracy, precision, and reliability of data generated for use, the Permittee shall submit a statement, certified as specified in LAC 33:V.513 and included in the annual report, indicating that:

II.E.9.c.(1) any commercial laboratory providing analytical results and test data to the Department required by

this permit is accredited by the Louisiana Environmental Laboratory Accreditation Program (LELAP) in accordance with LAC 33:1. Subpart 3, Chapter 45. Laboratory data generated by commercial laboratories not accredited under LELAP will not be accepted by the Department.

LAC 33:I. Subpart 3 (Chapters 45-49) provides requirements for the accreditation program. Regulations and a list of labs that have applied for accreditation are available on the LDEQ website at: http://www.deq.louisiana.gov/portal/Portals/0/laboratory/Accreditation.pdf

In accordance with LAC 33:I.4501, the requirements for LELAP accreditation applies whenever data is:

- submitted on behalf of a facility;
- required as part of a permit application;
- required by order of the Department;
- required to be included in a monitoring report submitted to the Department;
- required to be submitted by contract; or
- otherwise required by the Department regulations.

This includes, but is not limited to data from RCRA Trial Burns, Risks Burns, Risk Assessments, MACT Comprehensive Performance Tests, and data used for continuing compliance demonstrations.

- II.E.9.c.(2) If the Permittee decides to use their own in-house laboratory for test and analysis, the laboratory is not required to be accredited by LELAP. However, the laboratory must document and submit for approval, quality assurance/quality control procedures that are commensurate with requirements in LAC 33:I.Subpart 3. Laboratory Accreditation.
- II.E.9.c.(3) For approval of equivalent testing or analytical methods, the Permittee may petition for a regulatory amendment under LAC 33:V.105.I and LAC 33:I Chapter 9. In cases where an approved methodology for a parameter/analyte is not available or listed, a request to utilize an alternate

method shall be submitted to the Administrative Authority for approval. Documentation must be submitted to the LDEQ that will verify that the results obtained from the alternate method are equal to or better than those obtained from EPA-accepted methods, as well as those deemed equivalent by the LDEQ.

II.E.10. Retention of Records

The Permittee shall maintain records from all ground water monitoring wells and associated groundwater surface elevations for the active life of the facility and for the post-closure care period.

The Permittee shall maintain records through the active life of the facility (including operation, closure and post-closure periods) as required by LAC 33:V.309.J and LAC 33:V.1529.A, B, and C. All records, including plans, must be furnished upon request and made available at all reasonable times as required by LAC 33:V.1529.C.

File copies shall be kept for LDEQ inspection for a period of not less than three years as required by LAC 33:V.317.B.

The Permittee shall, for the life of the permit, maintain records of all data used to complete the application for this permit and any supplemental information submitted under the <u>Louisiana Hazardous Waste Control Law (LA. R.S. 30:2171 et seq.)</u>.

II.E.11. Notices of Planned Physical Facility Changes

The Permittee shall give notice to the Administrative Authority, as soon as possible, of any planned physical alterations or additions to the permitted facility, in accordance with LAC 33:V.309.L.1.

II.E.12. Physical Facility after Modification

For a closed unit being modified, the Permittee may not manage hazardous waste in the modified portion of the closed unit until:

II.E.12.a. the Permittee has submitted to and received approval from the Administrative Authority, by certified mail or hand delivery, a letter signed by the Permittee and an independent registered professional engineer stating that the unit is complete and has been constructed or modified in compliance with the permit; and

II.E.12.b. the Administrative Authority has inspected the modified unit following a request to make final inspection by the Permittee and finds it is in compliance with the conditions of the permit and all applicable sections of LAC 33:V.Subpart 1, and has issued an Order to Proceed. The Permittee may then commence treatment, storage, or disposal of hazardous waste.

II.E.13. Anticipated Noncompliance

The Permittee shall give advance notice to the Administrative Authority of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

II.E.14. Transfer of Permits

This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to LAC 33:V.309.L.4, 321.B, 321.C.4, and 1531.

II.E.15. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.

II.E.16. Noncompliance Reporting

The Permittee shall report orally within twenty-four (24) hours any noncompliance with the permit that may endanger human health or the environment, except where more immediate notification is required by LAC 33:I.3901, et seq. ("Notification Regulation and Procedures for Unauthorized Discharges" dated November 19, 1985, as amended.) This report shall include the following:

- II.E.16.a. information concerning the release of any hazardous waste that may endanger public drinking water supplies; and
- II.E.16.b. information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, that could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

- **II.E.16.b.(1)** name, address, and telephone number of the owner or operator;
- II.E.16.b.(2) name, address, and telephone number of the facility;
- **II.E.16.b.(3)** date, time, and type of incident;
- **II.E.16.b.(4)** name and quantity of materials involved;
- II.E.16.b.(5) the extent of injuries, if any;
- II.E.16.b.(6) an assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and
- II.E.16.b.(7) estimated quantity and disposition of recovered material that resulted from the incident.

II.E.17. Follow-up Written Report of Noncompliance

The Permittee shall provide a written submission within five (5) days after the time the Permittee becomes aware of any noncompliance which may endanger human health or the environment. However, where more immediate submission is required by LAC 33:I,3901, "Notification Regulations and Procedures for Unauthorized Discharges" dated November 19, 1985, as amended, the report shall be submitted in accordance with those regulations. submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. If the Administrative Authority waives the requirement, then the Permittee submits a written report within fifteen (15) days after the time the Permittee becomes aware of the circumstances, as required by LAC 33:V.309.L.7.

II.E.18. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time required monitoring reports are submitted. The reports shall contain the information listed in Condition II.E.16, above.

II.E.19. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or that it submitted incorrect information in a permit application, or in any report to the Administrative Authority, the Permittee shall promptly submit such facts or information.

II.E.20. Signatory Requirement

All applications, reports or other information submitted to the Administrative Authority shall be signed and certified according to LAC 33:V.507, 509, 511, and 513.

II.E.21. Schedule of Compliance

The permittee will comply with the following schedule, subject to extensions of time which may be granted as deemed necessary by the Administrative Authority. Upon approval of the various documents, permit modification requests must be submitted in accordance with LAC 33: V. 321.

TASK	SCHEDULE
1. Revised Post Closure Plan	Submit 60 days after effective date of the Hazardous Waste Post-Closure Permit, a revised and updated post-closure plan with an evaluation of current conditions and new permit requirements reflected in document.
2. Revised Waste Analysis Plan	Submit 90 days after the effective date of the Hazardous Waste Post-Closure Permit, an updated plan prepared in accordance with LAC 33:V.1519.
3. Corrective Action Plan Evaluation Report	Submit 180 days after effective date of the Hazardous Waste Post-Closure Permit. The plan should re-evaluate the facility's entire remediation system to address the contamination of the entire plume. In addition, the document should include Corrective Action information for Waste Management Units A, B, and C.

4. Revised Sampling and Analysis Plan	Submit 180 days after effective date of the Hazardous Waste Post-Closure Permit. The document should be updated in accordance with current site conditions.
5. Revised Groundwater Monitoring Plan	Submit 180 days after effective date of the Hazardous Waste Post-Closure Permit. The document should be updated in accordance with current site conditions.

II.E.22. Additional Operating Standards

(RESERVED)

II.E.23. Updated Documents To Be Submitted Prior To Operation

(RESERVED)

II.E.24. Documents To Be Maintained at Facility Site

- II.E.24.a. Until post-closure is completed and certified by an independent registered professional engineer, the Permittee shall maintain at the facility the following documents and any amendments, revisions, and modifications to these documents. Any revision or changes shall be submitted with the annual report unless previously submitted.
 - II.E.24.a.(1) Waste Analysis Plan submitted in accordance with LAC 33: V.1519.
 - II.E.24.a.(2) Personnel Training Plan and the training records as required by LAC 33:V.1515. (see Attachment 1)
 - II.E.24.a.(3) Contingency Plan submitted in accordance with LAC 33:V.1513. (see Attachment 1)
 - II.E.24.a.(4) Arrangements with local authorities in accordance with LAC 33:V.1511.G. (see Attachment 1)
 - II.E.24.a.(5) Post-Closure Plan submitted in accordance with LAC 33:V.3523 and any post-closure care requirements that may be required

initially or through permit modifications in accordance with LAC 33:V.3523. (see Attachment 1)

- II.E.24.a.(6) Cost estimate for facility post-closure care submitted in accordance with LAC 33:V.3709 and any post-closure cost estimate that may be required initially or through permit modifications in accordance with LAC 33:V.3709. (see Attachment1)
- II.E.24.a.(7) Operating Records as required by LAC 33:V.1529 and 2115.D.
- II.E.24.a.(8) Inspection Plan developed in accordance with LAC 33:V.517.G and 1509.B. (see Attachment 1)
- II.E.24.a.(9) Security Plan developed in accordance with LAC 33:V.1507. (see Attachment 1)
- **II.E.24.a.(10)** Sampling and Analysis Plan in accordance with LAC 33:V.303.Q. (see Attachment 1)
- **II.E.24.b.** All proposed amendments, revisions and modifications to any plan or cost estimates required by this permit shall be submitted to the Administrative Authority for approval.

II.E.25. Annual Report

An annual report shall be submitted covering all hazardous waste units and their activities during the previous calendar year as required by LAC 33:V.1529.D.

II.E.26. Manifest

The Permittee shall report manifest discrepancies and unmanifested waste as required by LAC 33:V.309.L.8 and 9.

II.E.27. Emissions

Emissions from any hazardous waste facility shall not violate the Louisiana Air Quality Regulations. If air quality standards are exceeded, the site will follow air regulation protocol.

II.E.28. Waste Discharges

Waste discharges from any hazardous waste facility shall not violate the Louisiana Water Quality Regulations. If water standards are exceeded, the site will follow water quality regulation protocol.

II.E.29. Non-Listed Hazardous Waste Facilities

This permit is issued for those hazardous waste facilities listed in Condition IV (Permitted Closed Facilities). If the Permittee determines that an un-permitted hazardous waste facility exists, the Permittee must immediately notify the Administrative Authority in accordance with Condition II.E. 19 of the General Permit Conditions.

II.E.30. Compliance With Land Disposal Restrictions

The Permittee shall comply with those land disposal restrictions set forth in LA. R.S. 30:2193, all regulations promulgated thereunder, and the HSWA portion of this permit (Condition VII).

II.E.31. Establishing Permit Conditions

Permits for facilities with pre-existing groundwater contamination are subject to all limits, conditions, remediation and corrective action programs designated under LAC 33:V.311.D and LAC 33:V.3303.

II.E.32. Obligation for Corrective Action

Owners or operators of hazardous waste management units must have all necessary permits during the active life of the unit and for any period necessary to comply with the corrective action requirements in Condition VIII of this permit. The facility is obligated to complete facility-wide corrective action regardless of the operational status of the facility.

II.E.33. Attachments and Documents Incorporated by Reference

All attachments and documents required by this permit, including all plans and schedules, are incorporated, upon approval by the Administrative Authority, into this permit by reference and become an enforceable part of this permit. Since required items are essential elements of this permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject the Permittee to enforcement action, which may include fines, suspension, or revocation of the permit.

Any noncompliance with approved plans and schedules shall be termed noncompliance with this permit. Written requests for extension of due dates for submittals may be granted by the Administrative Authority. If the Administrative Authority determines that actions beyond those provided for, or changes to what is stated herein, are warranted, the Administrative Authority may modify this permit according to procedures in LAC 33:V.321.

III. GENERAL POST-CLOSURE CONDITIONS

III.A. DESIGN AND OPERATION OF THE POST-CLOSURE UNIT

- III.A.1. The Permittee must maintain and operate all permitted closed units to minimize the possibility of a fire, explosion, or any unauthorized sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil, or water that could threaten human health or the environment.
- **III.A.2.** The Permittee must not manage any new wastes.

III.B. REQUIRED NOTICE

(RESERVED)

III.C. GENERAL WASTE ANALYSIS

The Permittee shall follow the procedures described in the Waste Analysis Plan and in accordance with LAC 33:V.1519.

- III.C.1. The Permittee shall review the Waste Analysis Plan annually and report to the Administrative Authority, in the annual report, whether any revision is required to stay abreast of changes in EPA methods and/or State regulatory provisions.
- III.C.2. If there is reason to believe that the hazardous waste has changed or the operation generating the hazardous waste has changed, the Permittee shall review and re-characterize all hazardous waste streams generated by the Permittee onsite and treated, stored or disposed onsite. The Permittee must re-characterize wastes in accordance with LAC 33:V.1519.A.3. This re-characterization shall include laboratory analyses which provide information needed to properly treat, store and dispose of the hazardous waste, including physical characteristics and chemical components of the waste. The results of this re-characterization shall be summarized in the Permittee's Annual Report.

- III.C.3. The Permittee shall submit documentation or certification if the Permittee contracts with an outside laboratory for any service required by the Waste Analysis Plan or LAC 33:V Chapter 15. This documentation or certification shall be resubmitted when a different laboratory is contracted. The Permittee shall also submit documentation that the laboratory complies with the accreditation requirements of LAC 33:I Chapter 45.
- III.C.4. In accordance with LAC 33:V.1519.B, the waste analysis plan must meet all the sampling and QA/QC procedures of Condition II.E.9. All test procedures used by the Permittee shall be maintained on file by the Permittee and made available to the Administrative Authority upon request.

III.D. SECURITY

The Permittee must comply with the security provisions of LAC 33:V.1507.

III.E. GENERAL INSPECTION REQUIREMENTS

The Permittee must follow the Inspection Plan referenced in Condition II.E.24.a.(8) and Attachment 1. The Permittee must remedy any deterioration or malfunction discovered by an inspection as required by LAC 33:V.1509.C. Records of inspections must be kept as required by LAC 33:V.1509.D. The inspection schedule must include the regulatory requirements of LAC 33:V.517.G, 1509.A and B, and 3523.

III.F. PERSONNEL TRAINING

The Permittee must conduct personnel training as required by LAC 33:V.1515.A, B, and C. The training shall follow the outline referenced in Attachment 1. The Permittee must maintain all training documents and records as required by LAC 33:V. 1515.D and E.

III.G. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

The Permittee must take precautions as required by LAC 33:V.1517 to prevent accidental ignition or reaction of ignitable or reactive wastes.

Ш.Н. LOCATION STANDARDS

III.H.1. The Permittee has furnished evidence that it is in compliance with seismic standards as required by LAC 33:V.517.T.

III.H.2. The Permittee must not manage any hazardous waste on any portion of the property that lies within the 100 year flood plain (as identified in the Flood Insurance Rating Map) unless such areas are raised above this flood level or other means (e.g., levees) are provided to protect such areas from washouts, overtopping by wave action, soil erosion or other effects of such a flood as required by LAC 33:V.1503.B.3. Such site improvements must be certified by independent licensed professional engineers and approved by LDEQ prior to any hazardous waste and/or hazardous waste units being placed thereon.

III.I. PRECIPITATION RUN-ON AND RUN-OFF

The Permittee must provide for the control by diversion or treatment of run-on and run-off resulting from a rainfall of at least twelve (12) inches, occurring during a period of twenty-four (24) hours in conformity with locally available records of a twenty-four (24) hour rainfall as per LAC 33:V.1503.B.2. The Permittee shall comply with the requirements of LAC 33:V.2911 and LAC 33:V.2719.

III.J. HURRICANE EVENTS

The Permittee must initiate those applicable portions of the Contingency Plan during a hurricane as well as appropriate actions required by LAC 33:V.1507, 1509 and 1511.

III.K. PREPAREDNESS AND PREVENTION

III.K.1. Required Equipment

At a minimum, the Permittee must install and maintain the equipment set forth in the Contingency Plan, as required by LAC 33:V.1511.C.

III.K.2. Testing and Maintenance of Equipment

The Permittee must test and maintain the equipment specified in Condition III.K.1 to insure its proper operation in time of emergency. The testing and maintenance of the equipment must be documented in the operating record.

III.K.3. Access to Communications or Alarm Systems

The Permittee must maintain access to the communications or alarm system as required by LAC 33:V.1511.E.l and 1511.E.2.

III.K.4. Arrangements with Local Authorities

The Permittee shall document in the annual report that the requirements of LAC 33:V.1511.G have been met. This documentation shall include those state and local agencies involved and those facilities and operations covered. Documentation of written arrangements with state and local agencies shall also be included in this report. Where state or local authorities decline to enter into such arrangements, the Permittee must document the refusal in the operating record.

III.L. CONTINGENCY PLAN

III.L.1. Implementation of Plan

The Permittee must immediately carry out the provisions of the Contingency Plan, and follow the emergency procedures described by LAC 33:V.1513.F whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that threaten or could threaten human health or the environment.

III.L.2. Copies of Plan

The Permittee must comply with the requirements of LAC 33:V.1513.C.

III.L.3. Amendments to Plan

The Permittee must review and immediately amend, if necessary, the Contingency Plan as required by LAC 33:V.1513.D.

III.L.4. Emergency Coordinator

The Permittee must comply with the requirements of LAC 33:V.1513.E, and 322.B.6 concerning the emergency coordinator.

III.M. MANIFEST SYSTEM

The Permittee shall comply with the manifest requirements of LAC 33:V.Chapter 9 and 11.

III.N. RECORD KEEPING AND REPORTING

III.N.1. Operating Record

The Permittee shall maintain a written operating record at the facility in accordance with LAC 33:V.1529.A, B, and C.

III.N.2. Annual Report

The Permittee must comply with the annual report requirements of LAC 33:V.1529.D.

III.N.3. Operations Manual

The Permittee shall compile and keep current an operations manual covering all aspects of the Permittee's treatment, storage and disposal facilities.

III.O. POST-CLOSURE

III.O.1. Post-Closure Care

The Permittee must manage the Drip Pad and Waste Management Units A, B, and C in accordance with this permit, LAC 33:V. 2521, 2809, 2911, and Chapter 35, Subchapter B.

III.O.2. Amendment to Post-Closure Permit

The Permittee must request modification to this post-closure permit when necessary, in accordance with LAC 33:V.3523.D. and LAC 33:V.321.

III.O.3. Post-Closure Maintenance

After final closure, the Permittee must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527, including maintenance and monitoring throughout the post-closure care period specified in the permit under LAC 33:V.3521.A.1. The Permittee must maintain all units in post-closure according to the requirements in Condition V.B.

III.O.4. Post-Closure Restrictions

The Administrative Authority may require, at partial and final closure, continuation of any of the security requirements of LAC 33:V.1507, during part or all of the post-closure care period when

access by the public or domestic livestock may pose a hazard to human health.

III.O.5. Post-Closure Property or Site Use

MI.O.5.a. Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the permitted closed unit's monitoring systems, unless the Administrative Authority finds that the disturbance:

III.O.5.a.i. is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

III.O.5.a.ii. is necessary to reduce a threat to human health or the environment.

III.O.5.b. Any post-closure activity other than that specified in this permit must have prior approval of the Administrative Authority.

III.O.6. Post-Closure Contact

The Permittee must provide the name, address, and phone number of the person or office to contact about the permitted post-closure units during the post-closure care period.

III.O.7. Certification of Completion of Post-Closure Care

No later than sixty (60) days after completion of the established post-closure care period for the specified unit, the Permittee must submit to the Administrative Authority, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit(s) was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the Permittee and an independent registered professional engineer. Within 60 days after receipt of the certification the Administrative Authority will notify the owner or operator that he is no longer required to maintain financial assurance for post-closure care of that unit, unless the Administrative Authority has reason to believe that post-closure

care was not conducted in accordance with the approved postclosure plan.

The certification of post-closure care shall include the certification statement found in the LAC 33:V.513.A or the current certification statement in the Louisiana hazardous waste regulations at the time of completion of post-closure care.

III.P. COST ESTIMATE FOR CARE OF THE POST-CLOSURE UNIT

- III.P.1. The Permittee must maintain a cost estimate for the permitted and associated structures as required by LAC 33:V.3709.
- III.P.2. The Permittee must maintain and adjust the post-closure cost estimate for inflation, as specified in LAC 33:V.3709.B, C, D, and for other circumstances that increase the cost of post-closure.
- III.P.3. The Permittee must base all post-closure cost estimates on the assumption that a third party contractor performs post-closure monitoring and maintenance in accordance with LAC 33:V.3709.A.
- III.P.4. The Permittee must consider the inventory and process conditions and their impact on the post-closure cost estimate for any resubmittal.
- III.P.5. During the life of the facility, the Permittee must keep, at the facility, its latest post-closure cost estimates, as necessary, to comply with LAC 33:V.3709.D.
- III.P.6. Throughout the active life of the facility, the Permittee must adjust and revise its post-closure cost estimates, as necessary, to comply with the provisions of LAC 33:V.3709.

III.Q. FINANCIAL ASSURANCE FOR THE POST-CLOSURE UNIT

Throughout the post-closure care period, the Permittee must provide updates for its financial assurance mechanisms, as necessary, to comply with the provisions of LAC 33:V.3711.

III.R. LIABILITY REQUIREMENTS

(RESERVED)

III.S. INCAPACITY OF THE PERMITTEE

The Permittee must comply with LAC 33:V.3717 whenever bankruptcy is initiated for the Permittee or its institutions providing financial assurance. If insurance is used for compliance with LAC 33:V.3715, the Permittee must immediately notify the Administrative Authority if the insurance company is placed in receivership. The Permittee must establish other financial assurance or liability coverage within sixty (60) days after such an event.

III.T. POST-CLOSURE NOTICES

If the Permittee or any subsequent Permittee of the land upon which this hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner or contaminated soils, he must request a modification to the post-closure permit in accordance with the applicable requirements in LAC 33:V, Chapters 3 and 7. The Permittee must demonstrate that the removal of hazardous wastes will satisfy the criteria of LAC 33:V.3521. By removing hazardous waste, the Permittee may become a generator of hazardous waste and must manage it in accordance with all applicable requirements of LAC 33:V, Subpart 1. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the Permittee may request that the Administrative Authority approve either:

- **III.T.1.** the removal of the notation on the deed to the facility property or other instrument normally examined during title search; or
- III.T.2. the addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

IV. PERMITTED CLOSED UNITS

This permit is applicable only to the units known as the Drip Pad, and Waste Management Areas A, B, and C which include Evaporation Pond-1, Evaporation Pond-2, Holding Pond, Waste Water Pond-1, Waste Water Pond-2, Waste Water Pond-3, Creosote Recovery Pond, Pentachlorophenol Recovery Pond, and the Sludge Pond located on the property of International Paper, Beauregard Parish, Louisiana. This permit also applies to any appurtenances associated with these units. The appurtenances are defined as any run-on/run-off control systems, leachate collection/leak detection systems, tanks, and/or piping and instrumentation associated with these regulated units. If any additional appurtenances are added in the future, they would be addressed through a permit modification as required by regulation and this permit.

V. PERMIT CONDITIONS APPLICABLE TO PERMITTED CLOSED UNITS

V.A. POST-CLOSURE CARE PERIOD

The post-closure care period will be in effect for the period of thirty (30) years from the date indicated below for each unit, unless extended or shortened by the Administrative Authority, as specified in LAC 33:V.3521.A.

- V.A.1. Drip Pad: On July 14, 1999, the post-closure care period began. The LDEQ verified that the unit was closed in accordance with the approved Closure Plan and all applicable regulations.
- V.A.2. Waste Management Area A: On October 23, 1984, the postclosure care period began. The Waste Management Area consists of Evaporation Pond 1, Evaporation Pond 2 and Holding Pond. The LDEQ verified that all units associated with WMA-A were closed in accordance with the approved Closure Plan and all applicable regulations.
- V.A.3. Waste Management Area B: On October 23, 1984, the post-closure care period began. The Waste Management Area consists of Pentachloraphenol Recovery Pond, Creosote Recovery Pond, and Wasterwater Ponds, 1, 2, and 3. The LDEQ verified that the units were closed in accordance with the approved Closure Plan and all applicable regulations.
- V.A.4 Waste Management Area C: On October 23, 1984, the post-closure care period began. The Waste Management Area consists of a Sludge Pond. The LDEQ verified that the units were closed in accordance with the approved Closure Plan and all applicable regulations.

V.B. POST-CLOSURE MAINTENANCE

After final closure, the owner or operator must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527, Condition III.O of this permit and the approved post-closure plan. This shall include maintenance and monitoring throughout the post-closure care period specified in the permit under Condition V.A and LAC 33:V.3521.A.1. The owner or operator must:

- **V.B.1.** For all permitted units in post-closure, the Permittee must:
 - V.B.1.a. maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

V.B.1.b. maintain the final cover designed and constructed to:

V.B.1.b.i. function with minimal maintenance:

V.B.1.b.ii. promote drainage and minimize erosion or

abrasion of the final cover;

V.B.1.b.iii. accommodate settling and subsidence, as

necessary, so that the cover's integrity is

maintained;

V.B.1.b.iv. have a permeability less than or equal to the

permeability of any bottom liner system or

natural subsoils present at the units;

V.B.1.c. maintain and monitor the groundwater monitoring system

and comply with all other applicable requirements of LAC

33:V. Chapter 33; and

V.B.1.d. manage and maintain a run-on and run-off control system to

prevent erosion or other damage to the final cover;

V.B.2. For the Drip pad, the Permittee must:

V.B.2.a. leachate collection system

(RESERVED)

V.B.3.b. protect and maintain surveyed benchmarks used in

complying with LAC 33.V.Chapter 33.

VI. GROUNDWATER PROTECTION

VI.A. APPLICABILITY

The regulations of LAC 33:V, Chapters 3, 5, 15, 25, 28, 29, 33, and 35 of the Louisiana Hazardous Waste Control Law Revised Statute (R.S.) 30:2203 of the Environmental Quality Act, R.S.30:2001 et seq., and the provisions of this section shall apply to groundwater protection programs at the permitted post-closure units, property of International Paper, Beauregard Parish, Louisiana. All requirements and conditions of this section must be satisfied and shall apply until the Administrative Authority has accepted the certification of completion of post-closure care required by regulation and under Condition III.O.7. of this permit. The units referenced in Condition IV of the permit are subject to post-closure groundwater monitoring.

If groundwater contamination is confirmed as a result of operations related to past or present hazardous waste management facilities associated with this site, the Permittee shall establish, expand or continue, assessment and corrective action programs in accordance with the requirements of LAC 33:V.Chapter 33 and as subsequently directed by the Administrative Authority.

VI.B. REQUIRED PROGRAMS

VI.B.1. WASTE MANAGEMENT AREA C

For Waste Management Area C, the Permittee must continue to conduct detection monitoring from the existing groundwater monitoring system specified in Conditions VI.C.-VI.H. and Condition VI.K. of this permit. The permit must be modified to establish a compliance monitoring program (Condition VI.I.) whenever hazardous waste constituents are confirmed in any monitoring well. Subsequently, the permit must be modified to establish a corrective action program as necessary (Condition VI.J.).

All wells listed on Table 1 must be maintained, protected from moving equipment and cannot be abandoned unless exempted from the program at a later date by the Administrative Authority. When the integrity of the well is threatened, it shall be replaced with a new well, in conformance with a work plan approved by the Administrative Authority. The construction of groundwater monitoring wells must conform to the standards and guidelines specified in "CONSTRUCTION OF GEOTECHNICAL **BOREHOLES AND GROUNDWATER** MONITORING SYSTEMS HANDBOOK", dated May 1993. This document is printed by and available from the Louisiana Department of Transportation and Development, Water Resources Section, P. O. Box 94245, Baton Rouge, Louisiana 70804-9245. Any required new wells should be installed within thirty (30) days of approval of the work plan by the Administrative Authority. Upon completion of new or replacement wells, a copy of DOTD-GW-1S, Louisiana Department of Transportation and Development Well Registration Short Form, is to be provided to the Administrative Authority. The entire groundwater monitoring system must be approved by the Administrative Authority. The Permittee must include in the Annual Report revised facility maps, which will show all its monitoring, assessment, compliance, and corrective action wells.

VI.B.2. WASTE MANAGEMENT AREA A, WASTE MANAGEMENT AREA B, and DRIP PAD

(RESERVED per Condition VI.L.)

VI.C. GROUNDWATER PROTECTION STANDARD

VI.C.1. The Permittee must comply with conditions specified in this permit that are designed to insure that hazardous waste and hazardous waste constituents do not exceed the concentration limits (see Condition VI.D) in the uppermost permeable zones underlying the waste management areas, beyond or below the points of

compliance (see Condition VI.E) during the compliance period (see Condition VI.F). The protection standard does not exempt the Permittee from required corrective actions regarding contamination detected by wells not assigned as groundwater compliance points.

- VI.C.2. The Permittee must utilize and maintain the present groundwater monitoring system described by the most current approved Sampling and Analysis Plan.
- VI.C.3. The Permittee must also measure pH and specific conductance as standard indicators of groundwater contamination, which will be used to indicate well integrity and possible groundwater contamination. The results of these analyses must be recorded in the field logbook.
- VI.C.4. All wells must be maintained so that surface infiltration is prohibited. Groundwater samples shall be monitored and analyzed for turbidity. Samples containing less than five (5) NTU (nephelometric turbidity unit) are acceptable for analysis when the analytical method is sensitive to turbidity (such as the analysis of metals). Samples containing greater than five (5) NTU are only acceptable when well development is certified by a qualified hydrogeologist as "the best obtainable". An evaluation of turbidity must accompany all potentially affected analytical values.

VI.D. HAZARDOUS CONSTITUENTS, PARAMETERS, ANALYTICAL FREQUENCY AND CONCENTRATION LIMITS

The wells, hazardous constituents, concentration limits and sampling frequency to which the protection standards of LAC 33:V.3305 apply are shown in the approved Sampling and Analysis Plan referenced in Attachment 1 and in Condition VI, Tables 1, 2 and 3 herein.

The Permittee must continue existing corrective actions or institute corrective actions in all areas associated with the permitted post-closure unit and appurtenances where groundwater has been affected by hazardous wastes, hazardous constituents, or parameters exceeding the assigned concentration limits, and implement corrective measures in other areas which may be discovered to exceed these limits in the future.

The Permittee must notify the Administrative Authority in accordance with the schedule specified in Conditions VI.H, VI.I, and VI.J, as applicable, when any of the groundwater monitoring parameters are detected in concentrations equal to or exceeding the designated limits at the points of compliance or upon first detection in any other monitoring well at the plant site.

VI.E. POINT OF COMPLIANCE

The point of compliance for Waste Management Area C at which the groundwater protection standard of LAC 33:V.3305.A applies, and at which semiannual monitoring must be conducted, is the imaginary vertical plane on the downgradient boundary of the unit that connects Wells DA-5, DA-33, and DB-33.

When contamination is detected in the uppermost permeable zone underlying the waste management area, the next vertical aquifer or permeable zone must also be monitored during compliance and corrective action periods. The horizontal limit of compliance must be the surface following an imaginary line connecting the risers of monitoring wells listed as Point of Compliance wells in Table 1 unless amended through permit modifications by the Administrative Authority in the future. The vertical limit of compliance must be the Uppermost Aquifer. Groundwater quality at each monitoring well identified below must be determined according to the most current approved Sampling and Analysis Plan and Condition VI.C, unless subsequent contamination is detected as per LAC 33:V.3303, then monitoring must be conducted as per Conditions VI.H, I and J of this permit.

TABLE 1
WASTE MANAGEMENT AREA C
MONITORING WELL NETWORK

WELL #	WELL TYPE	MONITORED ZONE	SAMPLING FREQUENCY
DA-2	Upgradient	Bentley Sand (upper)	Semiannual
DA-5	Point of Compliance	Bentley Sand (upper)	Semiannual
DA-33	Point of Compliance	Bentley Sand (upper)	Semiannual
DB-33	Point of Compliance	Bentley Sand (lower)	Semiannual

TABLE 2 WASTE MANAGEMENT AREA C Ground Water Protection Standard Constituents

Parameter			
Analytical 1 Conce	entration ²	Practical Quantitatio	n ³
	Method	Limit	Limit (PQL)
Benzene	8260B	$5.0 \times 10^{-03} \text{ mg/l}$.005 mg/l
Toluene	8260B	1.0 mg/l	1.0 mg/l
Benzo(a)anthracene	8270C	7.8 x 10 ⁻³ mg/l	*footnote #3
Fluoranthene	8270C	1.5 x 10 ⁻¹ mg/l	0.15 mg/l
Chrysene	8270C	1.6 x 10 ⁻³ mg/l	*footnote #3
Phenol	8270C	1.8 x 10 ⁻¹ mg/l	.010 mg/l
o-Cresol	8270C	$1.8 \times 10^{-2} \text{ mg/l}$.010 mg/l
m-Cresol	8270C	$1.8 \times 10^{-2} \text{ mg/l}$.010 mg/l
p-Cresol	8270C	$1.8 \times 10^{-2} \text{ mg/l}$.010 mg/l
Naphthalene	8270C	$1.0 \times 10^{-2} \text{ mg/l}$.010 mg/l
2,4-Dimethylphenol	8270C	7.2 x 10 ⁻² mg/l	.072 mg/l
Pentachlorophenol	8270C	1.0 x 10 ⁻³ mg/l	*footnote #3

- 1 Test Methods for Evaluating Solid Waste Physical/Chemical Methods, Third Edition (EPA Publication Number SW-846, 1986 as amended): must be in accordance with the latest edition of SW-846.
- 2 Concentration limits that apply to the groundwater protection standard under LAC 33:V.3305 unless changed through permit modification by the Administrative Authority. The groundwater protection standards were based upon groundwater screening standard (GW SS) developed by the LDEQ Risk Evaluation Corrective Action Program (RECAP). If technically feasible using Method SW-846 8270, the reported detection limit, either the PQL or the method detection limit (MDL), should be less than the calculated groundwater screening standards.
- 3 The permitee must report to the Administrative Authority, any detectable level of compounds on Table 2, even if lower than the detection limit (PQL or MDL). PQL denotes the lowest analyte concentration in a given matrix (groundwater) that the Administrative Authority believes a competent lab can be expected to achieve consistently. Samples must be analyzed using an SW-846 method that meets the listed detection limit.

Table 3 WASTE MANAGEMENT AREA C Sample Bottle and Preservative Specifications

Parameters	Container Type	Preservation Method
Benzene	Glass, 3-40 ml Vials with Teflon lined septum	Cool to 4°C Zero headspace
Toluene	Glass, 3-40 ml Vials with Teflon lined septum	Cool to 4°C Zero headspace
Benzo(a)anthracene	Amber Glass	Cool to 4°C
Fluoranthene	Amber Glass	Cool to 4°C
Chrysene	Amber Glass	Cool to 4°C
Phenol	Amber Glass	Cool to 4 ⁰ C
Cresol	Amber Glass	Cool to 4°C
Naphthalene	Amber Glass	Cool to 4°C
2,4-Dimethylphenol	Amber Glass	Cool to 4°C
Pentachlorophenol	Amber Glass	Cool to 4°C

Table 4a WASTE MANAGEMENT AREA C Semi-Annual and Annual Reporting Requirements

Parameter	Analysis	Frequency	Reporting	Graphical	Statistically
Water elevations	Field	Every sampling event	In groundwater collection forms and Semi-Annual GW report	Representation Potentiometric maps	Not required
Quality properties of groundwater sampled	Color, odor, remarks etc.	Every sampling event	In groundwater collection forms, field log book, and Semi-Annual GW report	No	Not required
pH Specific Conductance Turbidity	Field or Lab	Every sampling event	In groundwater collection forms, field log book, and Semi-Annual GW report	pH, specific conductance will be graphed value vs. time	
Naphthalene 2,4-Dimethylphenol Pentachlorophenol Benzo(a)anthracene Fluoranthracene Chrysene Phenol Cresol Benzene Toluene	Lab	Every Sampling event	Lab results reported in the Semi-Annual GW report	Not Required	Will be subject to demonstrations or evaluations regarding statistical significance of any parameter detections
QA/QC lab	n/a	Evaluated Every sampling event	Evaluated and reported semi-annually		
Quality properties of the groundwater	Field	Every sampling event	Evaluated and reported semi-annually	Not applicable	Not applicable
Maintenance of Monitoring Equipment	Field	Every sampling event	Evaluated and reported semi-annually		
Physical Well condition	Field	Every sampling event	Evaluated and reported semi-annually		
Purge water collection	n/a	Every sampling event	Disposition of purge water reported semi-annually		
QA/QC lab	n/a	Evaluated Every sampling event	Evaluated and reported semi-annually		

Table 4b WASTE MANAGEMENT AREA C Additional Annual Reporting Requirements

Parameter	Analysis	Frequency	Reporting	Graphical Representation	Statistically analyzed
Table 4 GW Monitoring Constituents	Lab	Annual sampling (POC wells only)	Concentrations reported in the Semi-Annual GW report	Not required	Will be subject to demonstrations or evaluations
Total depth measurements of the wells	Field	At least once a year	Total depth of each well will be measured at least annually and evaluated		

VI.F. COMPLIANCE PERIOD

The compliance period, during which the groundwater protection standard of LAC 33:V.3305.A applies, continues until the Administrative Authority has accepted the certification of completion of post-closure care required by regulation and under Condition III.0.7. of this permit. However, if a corrective action program has been implemented, the compliance period can not end until after the Permittee has demonstrated that the corrective action has been effectively implemented and the groundwater protection standard of LAC 33:V.3305.A has not been exceeded for a period of three (3) consecutive years.

VI.G. GENERAL REQUIREMENTS

- VI.G.1. The Permittee's groundwater monitoring system must consist of wells designated in Table 1, unless changed in the future by the Administrative Authority through permit modification.
- VI.G.2. Upgradient well, DA-2, must always yield groundwater samples from the uppermost water bearing zone that are representative of groundwater that has not been affected by possible leakage from the waste management units. Downgradient and vertical point of compliance wells must yield groundwater samples from the water bearing zones that represent the quality of groundwater beneath the facilities that flows to the points of compliance.
- VI.G.3. The Permittee must maintain the structural and mechanical integrity of all wells and provide protection from accidental damage and surface infiltration, as well as implement a monitoring well inspection schedule. A written report on damage to any well must be submitted to the Administrative Authority in accordance with Condition II.E.17 of this permit.

- VI.G.4. The Permittee must conform to the sampling and analysis requirements listed in Conditions VI.C, H, I, and J, herein, and as required by LAC 33:V.3315. A Semi-Annual Groundwater Monitoring Report must be prepared for each semi-annual sampling event and submitted to the Office of Environmental Assessment, Environmental Technology Division. Table 4a of this permit contains the required components for the Semi-Annual Groundwater Monitoring Reports.
- VI.G.5. The Permittee must use one of the statistical procedures referenced in LAC 33:V.3315.H in determining whether background values or concentrations have been exceeded for the detection monitoring parameters contained in Table 2. The groundwater quality parameters referenced in Condition VI.C.3. do not require statistical evaluation but must be reported and graphically represented for each semi-annual sampling event.
- VI.G.6. As a minimum, the Permittee must tabulate the results of the detection monitoring parameters in the Semi-Annual Groundwater Monitoring Report prepared for each sampling episode. Should a parameter be detected, the Permittee must also graphically represent (i.e., isopleth maps and concentration versus time graphs) the results.
- VI.G.7. Records of all sampling and analytical work must be maintained at the site during the life of the facilities, including post-closure care periods and made available upon request by the Administrative Authority.
- VI.G.8. An annual groundwater report must be submitted each year no later than March 1, as required by LAC 33:V.1529.D.8. This report must summarize and interpret all groundwater activities for the preceding calendar year including an evaluation of the monitoring strategy in relation to the direction of groundwater flow and locations of wells associated with the facilities. Applicable calculations must also include groundwater flow contaminant migration rates (as applicable), statistical comparisons (as applicable), and any other information as it regards corrective actions required by this permit. Tables 4a and 4b of the permit contain components to be included in the annual groundwater report.

VI.H. DETECTION MONITORING PROGRAM

VI.H.1. Any downgradient wells that become contaminated, but eventually produce groundwater samples with analytical results below the permitted concentration limits for monitored constituents for at least three (3) years as the result of a corrective action program, may be re-scheduled for detection monitoring on a schedule approved by the Administrative Authority.

- VI.H.2. The Permittee must utilize the existing groundwater detection monitoring system as required by LAC 33:V.3315 to obtain samples that provide a reliable indication of the presence of hazardous wastes or constituents in groundwater when compared to approved concentration limits listed in Table 2.
- VI.H.3. Detection systems shall be sampled according to the schedule specified in the most current approved Sampling and Analysis Plan. Within fifteen days after completing the analytical work and subsequent review of analyses and computations, the Permittee shall compile reports containing the test results, the statistical comparative data, groundwater potentiometric maps, graphs, copies of the field log book notes and chain of custody where appropriate, and a list of the parameters that were statistically significant for the sampling event. This information shall be maintained at the facility as provided in Condition VI.G.7, except that statistically significant parameter measurements must be forwarded for review by the Administrative Authority in accordance with Condition VI.H.5.
- VI.H.4. The monitoring system outlined in Table 1 must be utilized for groundwater sampling.
- VI.H.5. If the Permittee determines that there is statistically significant evidence of contamination for chemical parameters or hazardous constituents specified pursuant to LAC 33:V.3317.A. at any monitoring well at the compliance point, the Permittee must do the following:
 - VI.H.5.a. Notify the Administrative Authority of this finding in writing within seven (7) days. This notification must indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination.
 - VI.H.5.b. Immediately sample the groundwater in all monitoring wells for confirmation and determine whether constituents listed in LAC 33:V.3325 Table 4 are present, and if so, in what concentration.
 - VI.H.5.c. For any LAC 33:V.3325. Table 4 compounds found in the analysis pursuant to Condition VI.H.5.b above, the Permittee may resample within one (1) month and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents

will form the basis for compliance monitoring. If the Permittee does not resample for the compounds found pursuant to Condition VI.H.5.b above, the hazardous constituents found during this initial analysis will form the basis for compliance monitoring. If contamination is not confirmed, the Permittee shall continue monitoring according to the schedule specified in the most current approved Sampling and Analysis Plan. The Permittee must address confirmed groundwater contamination problems at the direction of the Administrative Authority, regardless of the source of the contamination.

- VI.H.6. The Permittee must submit an application for a permit modification to the Administrative Authority within ninety (90) days from the date of the confirmation of contamination. The application must include:
 - VI.H.6.a. An identification of the concentration of any LAC 33:V. 3325. Table 4 constituent detected in the groundwater at each monitoring well at the compliance point;
 - VI.H.6.b. Any proposed changes to the groundwater monitoring system at the facility necessary to meet the requirements of LAC 33:V.3319;
 - VI.H.6.c. Any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of LAC 33:V.3319; and
 - VI.H.6.d. For each hazardous constituent detected (as defined in LAC 33:V.3301.A.1) at the compliance point, a proposed concentration limit under LAC 33:V.3309.
- VI.H.7. If the Permittee determines that there is statistically significant difference for analytical parameters of hazardous constituents, which are specified pursuant to the groundwater protection standard, listed in most current approved Sampling and Analysis Plan or Condition VI.D at any monitoring well at the compliance point, the Permittee may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an

artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater. The Permittee may make a demonstration under this Paragraph in addition to, or in lieu of, submitting a permit modification application; however, the Permittee is not relieved of the requirement to submit a permit modification application within the time specified in LAC 33:V.3317.G.4 unless the demonstration made under this Paragraph successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this Paragraph the Permittee must:

- VI.H.7.a. Notify the Administrative Authority in writing within seven (7) days of determining statistically significant evidence of contamination at the compliance point that he or she intends to make a demonstration under this Paragraph;
- VI.H.7.b. Within ninety (90) days, submit a report to the Administrative Authority that demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation;
- VI.H.7.c. Within ninety (90) days, submit to the Administrative Authority an application for a permit modification to make any appropriate changes to the detection monitoring program facility; and
- VI.H.7.d. Continue to monitor in accordance with the detection monitoring program established under this permit.
- VI.H.8. If the Permittee determines that the detection monitoring program no longer satisfies the requirements of this permit, the Permittee, within 90 days, shall submit an application for a permit modification to make any appropriate changes to the program.

VI.I. COMPLIANCE MONITORING

The Permittee must conduct a compliance monitoring program in accordance with LAC 33:V.3319 whenever hazardous waste constituents are confirmed in any monitoring well.

VI.I.1. The Permittee must determine the concentration of each hazardous constituent listed in the most current approved Sampling and Analysis Plan at least semiannually during compliance monitoring periods (from groundwater in the wells required by Condition

- VI.C.2). At least annually the Permittee must analyze samples from all monitoring wells at the compliance points for all constituents listed in LAC 33:V.3325, Table 4, to determine whether additional hazardous constituents are present in the uppermost aquifer (and, if so, at what concentration), pursuant to procedures of this permit. If the Permittee finds LAC 33:V.3325, Table 4 constituents in the groundwater that are not already identified in the permit as monitoring constituents, the Permittee may re-sample within one month and repeat LAC 33:V.3325, Table 4 analysis. If the second analysis confirms the presence of new constituents, the Permittee must report the concentrations of these additional constituents to the Administrative Authority within seven (7) days after the completion of the second analysis and add them to the monitoring list. If the Permittee chooses not to re-sample, then he or she must report the concentrations of these additional constituents to the Administrative Authority within seven (7) days after completion of the initial analysis and add them to the monitoring list.
- VI.I.2. If the Permittee determines, pursuant to LAC 33:V.3319.D, and Condition VI.C that any concentration limits under LAC 33:V.3309 are being exceeded at any monitoring well at the point of compliance, he must:
 - VI.I.2.a. notify the Administrative Authority of this finding in writing within seven (7) days. The notification must indicate which concentration limits have been exceeded and list the contaminants and concentrations; and
 - VI.I.2.b. submit, to the Administrative Authority, an application for a permit modification to establish or modify corrective action programs meeting the requirements of LAC 33:V.3321 within 180 days, or within ninety (90) days if a certified engineering feasibility study has been previously submitted to the Administrative Authority under LAC 33:V.3317.G.5.b. The application must include the following information:
 - VI.I.2.b.i. a detailed description and schedule for assessment and corrective actions that will achieve compliance with the groundwater protection standard specified in Condition VI.D of this permit under LAC 33:V.3319.A; and
 - VI.I.2.b.ii. a geotechnical plan (certified by a qualified geologist or a geotechnical engineer) to

demonstrate the effectiveness of the planned corrective actions. This plan may incorporate the compliance monitoring program developed to meet the requirements of this permit, except that the Permittee will be required to monitor as frequently as necessary (as required in Condition VI.J.1) to assure that sufficient data will be generated for demonstrating the effectiveness of the corrective actions; and

- VI.I.2.c. If the Permittee determines, pursuant to LAC 33:V.3319.D, that the groundwater concentration limits under Condition VI.D are being exceeded at any monitoring well pursuant to VI.H.5, he or she may demonstrate that a source other than a regulated unit caused the contamination, or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation, or natural variation in the groundwater. In making a demonstration under this Condition, the Permittee, must:
 - VI.I.2.c.i. notify the Administrative Authority in writing within seven (7) days that he or she intends to make a demonstration under this condition;
 - VI.1.2.c.ii. within ninety (90) days, submit a report to the Administrative Authority which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from an error in sampling, analysis or evaluation;
 - VI.I.2.c.iii. within ninety (90) days, submit to the Administrative Authority an application for a permit modification to make any appropriate changes to the compliance monitoring program at the facility; and
 - VI.I.2.c.iv. continue to monitor in accordance with the compliance monitoring program established under this permit.

VI.1.2.d. If the Permittee determines that the compliance monitoring program no longer satisfies the requirements of this permit, he or she must, within ninety (90) days submit an application for a permit modification to make any appropriate changes to the program.

VI.J. CORRECTIVE ACTION PROGRAM

- If subsequent groundwater contamination is confirmed as a result VI.J.1. of operations related to past or present hazardous waste management facilities identified in Condition VI.B.1 of this permit, the Permittee must establish, expand, or continue any corrective action programs in accordance with the requirements of LAC 33:V.3321, and as subsequently directed by the Administrative Authority. Water quality sampling, water level measurements and the general compilation of data to demonstrate the effectiveness of existing and new corrective action programs must be made on a semiannual basis until compliance with groundwater protection standards is achieved for at least three (3) years or until this requirement is terminated in writing by the Administrative Authority (after the data indicates adequate control of contaminant migration and concentration increases). The effectiveness of the corrective actions by the Permittee must be reported semi-annually to the Administrative Authority as stipulated in LAC 33:V.3321.G., and must include the following:
 - VI.J.1.a. a facility map showing all upgradient, assessment, plume defining, point of compliance monitoring wells and recovery wells and identifying zones in which wells are screened;
 - VI.J.1.b. a table showing well number, well depth, screened interval, zone monitored, well diameter and screen and casing material for all upgradient, assessment, plume defining, point of compliance monitoring wells, and recovery wells and the type of pump used if the well is a recovery well;
 - VI.J.1.c. a summary of analytical data for all upgradient, assessment, plume defining, point of compliance monitoring wells, and recovery wells for the reporting period;
 - VI.J.1.d. a discussion of any significant changes in the analytical data from all upgradient, assessment, plume defining,

- point of compliance monitoring wells, and recovery wells for the reporting period;
- VI.J.1.e. contaminant concentration isopleths for each monitored zone and each contaminant;
- VI.J.1.f. water level measurements and potentiometric surface maps for each monitored zone for the reporting period;
- VI.J.1.g. total volume of liquids removed and the volume of contaminants removed for each components of the system (i.e. recovery wells, French drain systems, etc.) and cumulative amount for the entire system for the reporting period and total volume to date;
- VI.J.1.h. a discussion of the down time for any well or part of the system for the reporting period and actions taken by the facility to return the system to normal operations and maximum efficiency;
- VI.J.1.i. concentration versus time graphs for all wells used to determine the effectiveness of the contaminant recovery program; and
- VI.J.1.j. a discussion of the effectiveness and progress of remedial activities.
- VI.J.2. Additionally, and in accordance with the authority of Louisiana's Hazardous Waste Control Law, R.S. 30:2203, of the Environmental Quality Act, R.S. 30:2001 et seq., and as allowed by LAC 33:V.309.L.7. pertaining to special conditions of the groundwater section, the Permittee must notify the Administrative Authority upon learning of the discharge of any waste or substance into the groundwaters of the State at the International Paper plant site. As a result of such discharges to ground waters, the permittee shall:
 - VI.J.2.a. notify the Administrative Authority of the nature and circumstances of the discharge within seven (7) days of discovery.
 - VI.J.2.b. submit adequate plans and schedules certified by a qualified geologist or geotechnical engineer to evaluate the extent of the discharge and need for corrective actions within ninety (90) days from the notification in Condition VI.J.2.a above; and

VI.J.2.c. submit a schedule and plans for corrective actions as directed by the Administrative Authority within sixty (60) days from completion of the groundwater evaluation in Condition VI.J.2.b. above.

VI.K. ABANDONMENT OF MONITORING WELLS AND GEOTECHNICAL BOREHOLES

The Permittee must provide for the sealing of any vertical migration path resulting from exploratory boring, leachate collection or detection systems and/or groundwater monitoring programs as provided in LAC 33:V.3323, and follow abandonment procedures conforming to the standards and guidelines specified in "CONSTRUCTION OF GEOTECHNICAL BOREHOLES AND GROUNDWATER MONITORING SYSTEMS HANDBOOK", dated May 1993 ("Construction Handbook", May 1993). This document is printed by and available from the Louisiana Department of Transportation and Development, Water Resources Section, P. O. Box 94245, Baton Rouge, Louisiana 70804-9245. A work plan for the plugging and abandonment of a well must be submitted for approval by the Administrative Authority, whenever such migration pathways are discovered. Upon completion of well abandonment, a copy of DOTD-GW-2, Louisiana Department of Transportation and Development Well Plugging and Abandonment Form, must be submitted to the Administrative Authority.

VI.L. ALTERNATIVE MONITORING REQUIREMENTS AT WASTE MANAGEMENT AREA A, WASTE MANAGEMENT AREA B, AND DRIP PAD

Pursuant to LAC 33:V.3301.G, the Administrative Authority has determined that: 1) the regulated units identified as Waste Management Area A, Waste Area B, and the Drip Pad, are situated among solid waste management units (SWMU) or areas of concern (AOC), a release has occurred, and both the regulated units and SWMU(s) or AOC are likely to have contributed to the release; and 2) it is not necessary to apply the groundwater monitoring and corrective action requirements of LAC 33:V.Chapter 33 because alternative requirements will protect human health and the environment. Accordingly, the Administrative Authority may replace all or part of the requirements of LAC 33:V.Chapter 33, applying to a regulated unit (i.e., LAC 33:V.3303 through 3321) with alternative requirements for groundwater monitoring and corrective action for releases to groundwater. This section provides a description of the alternative monitoring requirements.

Except as indicated below, in lieu of LAC 33:V.3303 through 3311 and LAC 33:V.3315 through 3321 being applied to the regulated units, the Permittee shall comply with LAC 33:V.3322 (Corrective Action) and as further delineated in Condition VIII (Special Conditions Pursuant to Hazardous and Solid Waste Amendments-Corrective Action Strategy) of this permit. The Permittee must comply with these alternative monitoring requirements during the compliance period (see Condition VI.F.) unless the permit is otherwise modified by the Administrative Authority. The Permittee must continue to conduct monitoring and corrective action per the groundwater protection programs referenced and most current approved Sampling and Analysis Plan and Groundwater Monitoring Program (see Attachment 1). Any required revisions to these documents are referenced in Condition II.E.21 of this permit.

The wells listed in Table 5 are hereby designated for "alternative sampling" due to their locations in relation to the permitted units (i.e., the wells are located near the perimeter for vertical compliance or near an area of high concentration). Accordingly, alternative sampling shall follow the procedures of LAC33:V.3319.G in order to determine whether additional hazardous constituents are present and, if so, at what concentration. These wells must be analyzed on a three year rotating schedule so that one well is sampled in the first year period, the second well is sampled in the second year period, and the third well sampled in the third year period, for constituents excluding organochlorine pesticides, organophosphorus pesticides, and herbicides, listed in LAC 33:V.3325, Table 4 (With approval from the Administrative Authority, wells with free phase material need not be sampled until such time as free phase material is no longer present in these wells). Table 4 constituents analyzed that are confirmed to be present must be added to the semi-annual monitoring program.

Table 5
Groundwater Monitoring
Alternative Sampling Wells

Well Number Monitored Zone	
DB-18, DB-29	Bentley Sand (lower)
DC-18	Williana Silt and Clay